

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-5 (canceled).

Claim 6 (currently amended): ~~[[The]]~~ A bar-code reader ~~according to claim 5,~~
comprising:

an optical scanner that optically scans a bar code to obtain signal strength of light reflected from black bars and white bars of the bar code;

an extracting unit that extracts edge data, which includes a plurality of edges and the signal strength of which changes corresponding to a change from a black bar to a white bar and vice versa;

an edge-emphasizing unit that emphasizes edge data of an edge that satisfies a predetermined condition;

a ternary judgment unit that makes a ternary judgment of each edge based on the edge emphasized to obtain a ternarizing result; and

a decoder that decodes bar-code characters from the ternarizing result,

wherein the edge-emphasizing unit emphasizes an amplitude of the edge, when the edge

data is expressed in a waveform with time on a horizontal axis and amplitude on a vertical axis,
and when an edge having a frequency of a module greater than a predetermined threshold value is
detected, and causes a change in emphasizing characteristics that emphasize the amplitude of the
edge, based on the frequency of the module.

Claims 7-12 (canceled).

Claim 13 (currently amended): ~~[[The]]~~ A method according to claim 12, of reading a bar
code comprising:

optically scanning a bar code to obtain signal strength of light reflected from black and
white bars of the bar code;

extracting edge data, which includes a plurality of edges and the signal strength of which
changes corresponding to a change from a black bar to a white bar and vice versa;

emphasizing an edge from the edge data;

making a ternary judgment for each edge based on the edge emphasized to obtain a
ternarizing result; and

decoding bar-code characters from the ternarizing result,

wherein the emphasizing ~~further~~ includes emphasizing an amplitude of the edge, when
the edge data is expressed in a waveform with time on a horizontal axis and amplitude on a
vertical axis, and when an edge having a frequency of a module greater than a predetermined

threshold value is detected, and causing a change in emphasizing characteristics that emphasize the amplitude of the edge, based on the frequency of the module.

Claims 14-19 (canceled).

Claim 20 (currently amended): ~~[[The]] A computer program according to claim 19;~~
for reading a bar-code that makes the computer execute:

optically scanning a bar code to obtain signal strength of light reflected from black and white bars of the bar code;

extracting edge data, which includes a plurality of edges and the signal strength of which changes corresponding to a change from a black bar to a white bar and vice versa;

emphasizing an edge from the edge data;

making a ternary judgment of each edge based on the edge emphasized to obtain a ternarizing result; and

decoding bar-code characters from the ternarizing result,

wherein the emphasizing ~~further~~ includes emphasizing an amplitude of the edge, when the edge data is expressed in waveform with time on a horizontal axis and amplitude on a vertical axis, and when an edge having a frequency of a module greater than a predetermined threshold value is detected, and causing a change in emphasizing characteristics that emphasize the amplitude of the edge, based on the frequency of the module.